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Notice of Allowability	**Application No.** 10/679,475	**Applicant(s)** MILANA, ANGELO
	Examiner Christopher Verdier	**Art Unit** 3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the telephone interview of February 28, 2006*.
2. ☒ The allowed claim(s) is/are *23-27*.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
   1. ☒ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
   1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Angleo Milana, pro-se applicant, on February 28, 2006.

The application has been amended as follows:

In the Specification:

In the Substitute Specification filed October 4, 2005, which is approved for entry, the following changes have been made:

On page 1, lines 3-16 have been deleted.

On page 1, line 17, -- VERSATILE AXIAL FAN AND CENTRIFUGAL SHUTTER MECHANISM -- has been inserted.

On page 6, line 17, after vane, -- interconnected with crank rods and at least a tie rod, said central operative vane -- has been inserted.

On page 6, line 18, "are interconnected with crank means and at" has been deleted.

On page 6, line 19, "least one tie rod in order to" has been deleted.

On page 7, line 21, -- slanted -- has been inserted before "housing".

On page 8, line 17, -- pivotal -- has been inserted after "of".

On page 11, line 9, "H" has been changed to -- A --.

On page 11, line 12, "V" has been changed to -- B --.

On page 11, line 15, "H" has been deleted.

On page 11, line 15, "1" has been changed to -- 1A --.

On page 11, line 18, "V" has been changed to -- B --.

On page 11, line 22, "V" has been changed to -- B --.

On page 12, line 4, "centrifugal" has been changed to -- axial sliding reciprocating --.

On page 12, lines 5-7 are deleted.

On page 12, lines 11-14 are deleted.

On page 12, line 21, "H" has been changed to -- A --.

On page 12, line 21, "V" has been changed to -- B --.

On page 12, line 21, "H" (second occurrence) has been deleted.

On page 13, line 14, -- wall -- has been inserted after "square".

On page 13, line 19, "H" (first occurrence) has been changed to -- A --.

On page 13, line 19, "H" (second occurrence) has been deleted.

On page 13, line 21, "V" has been changed to -- B --.

On page 13, line 23, "H" (first occurrence) has been changed to -- A --.

On page 13, line 23, "H" (second occurrence) has been deleted.

On page 14, line 20, -- propeller -- has been inserted after 'the" (second occurrence).

On page 15, line 13, "H" has been changed to -- A --.

On page 15, line 18, "when handling very dusty air" has been deleted.

On page 15, line 21, "virtually" has been deleted.

On page 16, line 2, "H" has been deleted.

On page 16, line 20, "H" has been deleted.

On page 17, line 9, "or for traction" has been deleted.

On page 17, line 19, -- triangular -- has been inserted after "shaped".

On page 18, line 6, "1o" has been changed to -- 10 --.

On page 18, line 10, "H" has been deleted.

On page 18, line 14, "inner" has been changed to -- internal --.

On page 18, line 16, "5c" has been changed to -- 5 --.

On page 18, lines 18-25 have been deleted.

On page 19, lines 1-4 have been deleted.

On page 19, line 6, "H" has been deleted.

On page 19, line 18, after "26b", -- and the shoes are made of soft rubber -- has been inserted.

On page 20, line 9, "H" has been deleted.

On page 21, line 5, -- electric or hydraulic -- has been inserted after "the" (first occurrence).

On page 21, line 13, " 17" " has been deleted.

On page 21, line 25, ", for" has been deleted.

On page 22, line 1 has been deleted.

On page 22, line 2, "mounted shutter vanes" has been deleted.

In the abstract:

The abstract has been replaced by the abstract attached at the end of this amendment.

In the Claims:

Claims 11-22 are canceled.

New claims 23-27 are added:

-- 23. (New) An improved axial fan for exhausting humid, corrosive and dusty air, the improvements comprising:

a) a housing enclosure having an inner cavity defining an air flow passageway having large radii corners and having a first opening of square section with a shutter assembly comprising a frame on which are pivotally mounted a plurality of vanes including a central vane, for closing or opening said first opening, each of said vanes being pivotally interconnected, with crank rods and at least one tie rod, said frame further comprising an operative extension spring with one end connected to said frame and the other end connected to said tie rod for urging, upon fan operation, the shutter vanes toward a full wide open position,

b) an axially spaced second opening of round section including a safety guard,

c) a streamlined central structural member, axially spaced between said openings, connecting two opposite sides of said housing enclosure and comprising a pair of airfoil wings for guiding efficiently the air flow,

d) a drive motor that is either electric or hydraulic mounted on a rigid base secured to said central structural member,

e) a propeller-pulley assembly secured at one end of a rotating shaft fitted into a pair of pillow block bearings bolted to said central structural member for rotatably holding said propeller-pulley assembly comprising a plurality of airfoil blades extending radially outwardly from said propeller-pulley assembly and rotating with said propeller-pulley assembly, said propeller pulley assembly being located opposite to said shutter assembly,

f) a venturi built with said fan housing enclosure, substantially entirely surrounding at close distance the blade tips of the propeller,

g) a centrifugal shutter mechanism, connected at one end of said rotating shaft of said fan, for moving the shutter from a closed position, when the fan is disabled, to a normally open position when the fan is enabled, and comprising a hermetic housing assembly, said housing being made up of a pair of matching molded shells comprising a pair of oppositely radially extending cavities, each cavity including a pair of movable masses equally spaced apart relative to the fan rotational axis and operatively connected to an axially sliding reciprocating actuator via a pair of arms pivotally attached to said hermetic housing, said arms being operatively connected at corresponding ends respectively to the axially sliding actuator located into an axially extending cavity of said hermetic housing coaxially to said fan axis of rotation and positioned adjacent to said central vane of said shutter assembly, said axial sliding actuator further comprising an internal operative spring and an operative end located in proximity to the shutter central vane, said actuator being movable between an outward position frictionally engaging a convex shaped cam secured to said central vane of said shutter to rotate and shut said shutter central vane and the other vanes by the biasing force of said internal spring and an inward position away from said central vane of said shutter for causing the opening of said shutter in response to the rotation of said propeller, said opening and closing controlled by the minimum speed of operation of the fan.

24. (New) The fan as claimed in claim 23, wherein said plurality of radial airfoil blades comprise radially extending adjustable flexible means mounted at the tips of each blade for adjusting the tip blade clearance with said venturi of said fan housing, said improved housing including a rigid roll-formed ring located adjacent to said blade tips.

25. (New) The fan as claimed in claim 24, wherein said adjustable flexible means are made of soft rubber adapted to minimize the clearance between the venturi and blade tips for preventing air from flowing back around the blade tips for increased performance of said fan, enabling said fan to work efficiently at higher static pressure with reduced air vortices, vibrations and noise.

26. (New) The fan as claimed in claim 23, wherein said square frame of said shutter assembly includes longitudinally extending cavities and comprises plastic rods on which are pivotally received said vanes of said shutter, said frame assembly being adapted to be

mounted selectively either horizontally or vertically across said inlet opening of said fan housing.

27. (New) The fan as claimed in claim 23, each of said arms being movably connected at corresponding ends with said axial sliding actuator for transferring radial movements of said centrifugal masses, upon fan rotation, to axial movements of said axial actuator, so that said centrifugal masses and said arms will swing in unison during any axial stroke of the axially sliding actuator. --

In the Drawings:

The following changes to the drawings have been approved by the examiner and agreed upon by applicant. These drawing changes have been made by the Patent Office. This is not a standard practice by the Patent Office, but the drawings have been corrected to place the application in proper form due to the fact that the applicant is a pro-se applicant to expedite prosecution.

In figure 1 H, “1 H” has been changed to -- 1A --.

In figure 1 V, “1 V” has been changed to -- 1B --.

In figure 2 H, “2 H” has been changed to -- 2 --.

Figures 5 B and 6 B are canceled.

The heading “Replacement Sheet” has been provided at the top margin of figures 1A, 1B, 2, 3A, 3B, 4, 5, 6, and 7.

The above changes to the specification have been made in order to expedite prosecution by placing the application in condition for allowance. Specifically, the deletions on page 12, lines 5-7 and 11-14, page 15, line 18, page 15, line 21, page 18, lines 18-25, page 19, lines 1-4, and page 22, lines 1-2 have been made to remove new matter from the specification. The changes to page 6, line 17, page 19, line 18, and page 21, line 5 have been made to provide antecedent basis for original claim limitations. The other changes to the specification have been made to correct informalities. The new abstract has been provided in order to provide an abstract of less than 150 words. The above changes to the drawings have been made in order to provide proper numbering of the drawing figures, and to make the drawings complaint with 37 CFR 1.121. Figures 5 B and 6 B have been canceled because these figures contain new matter. Claims 11-22 have been canceled and replacement claims 23-27 have been provided in response to applicant's request for constructive assistance, in order to expedite prosecution by placing this application in condition for allowance. Claims 23-27 substantially correspond to original claims 1-3, 6, and 8, respectively, which were indicted as containing allowable subject matter in the first Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
February 28, 2006

Christopher Verdier
Primary Examiner
Art Unit 3745

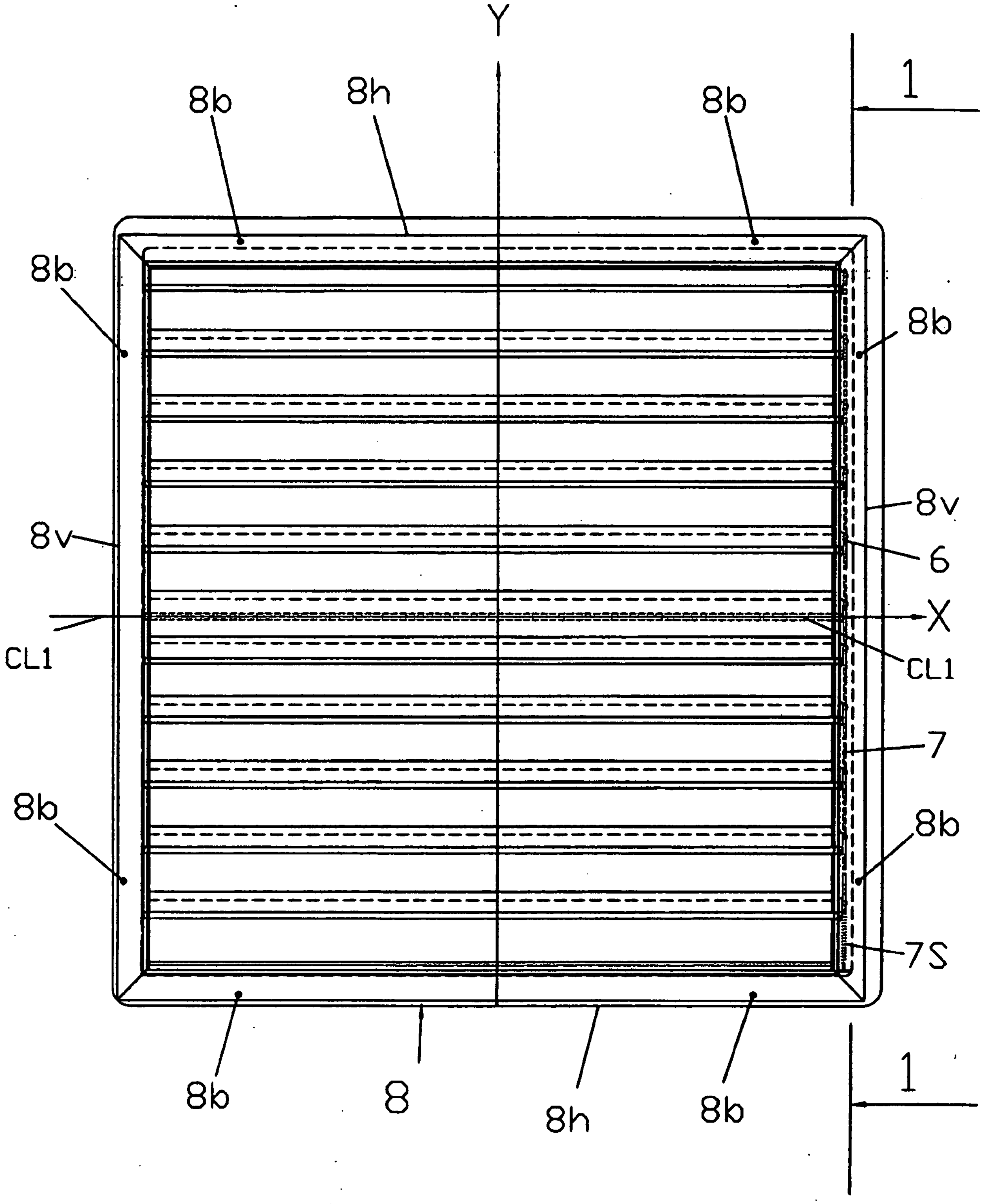


FIG. 1A

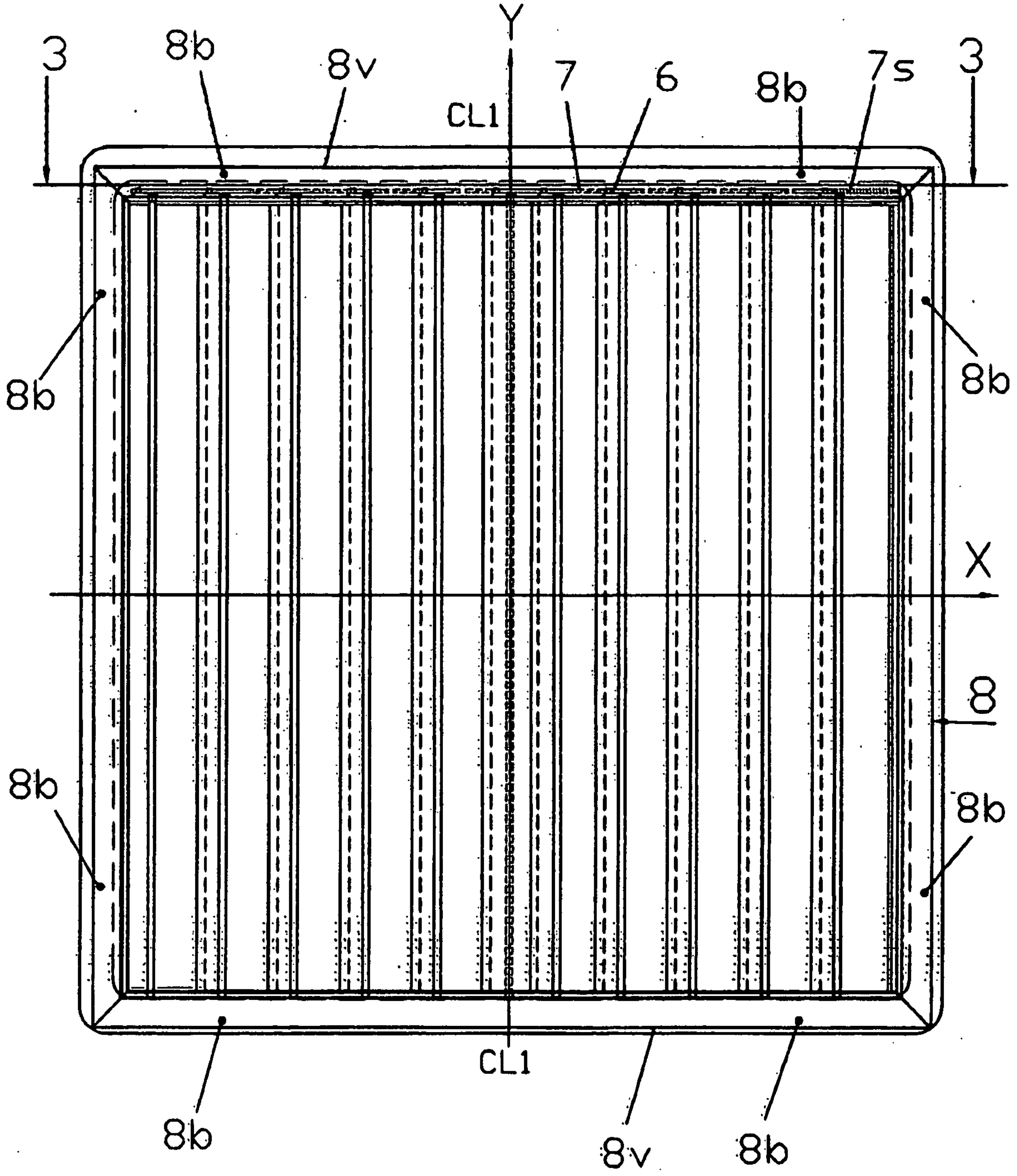


FIG. 1B

Replacement Sheet

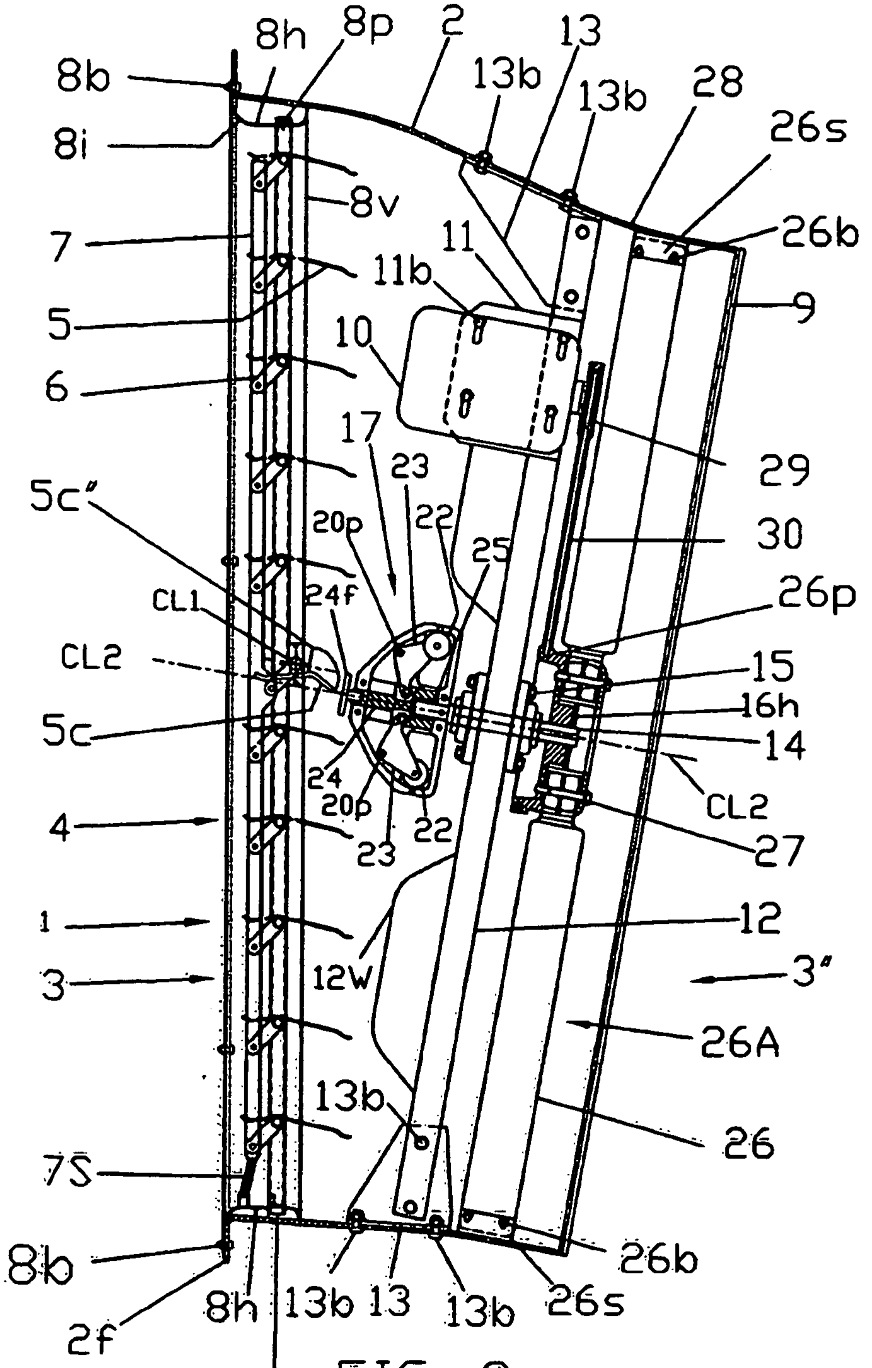
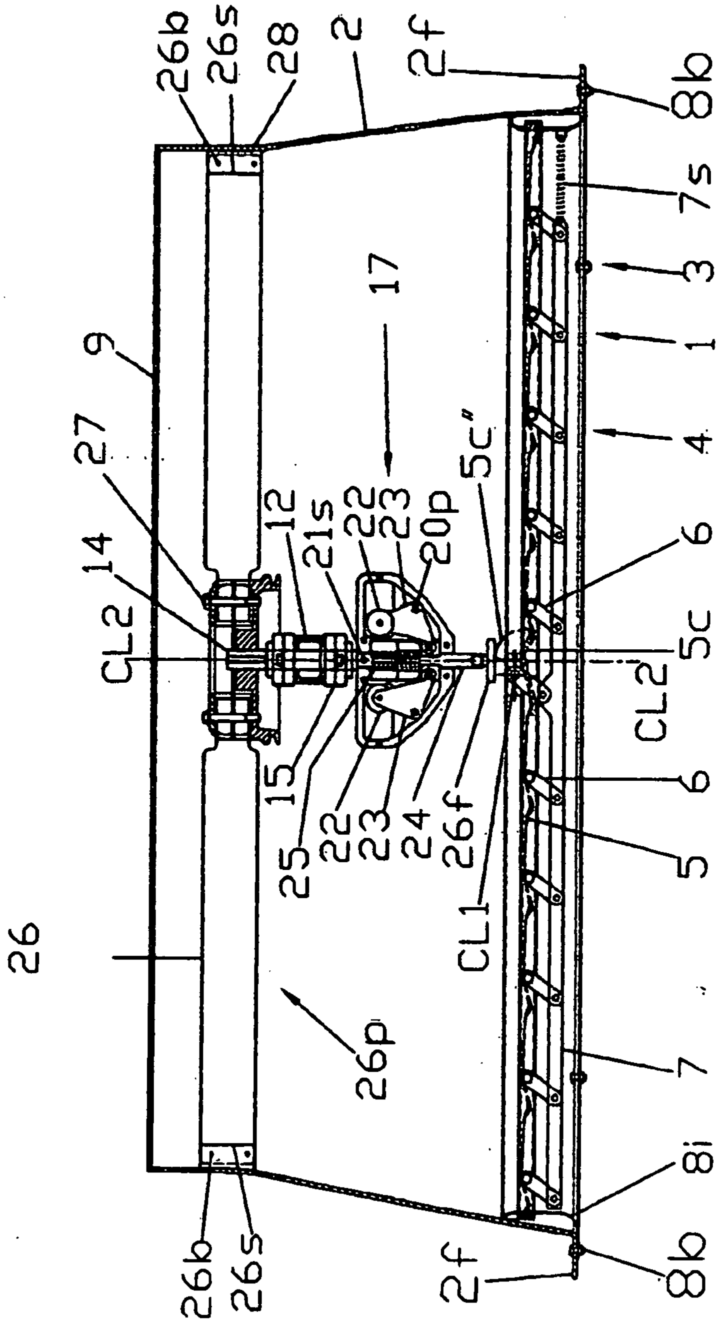


FIG. 2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2f
8b
7s
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CL2
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26s

FIG.3A

Replacement Sheet

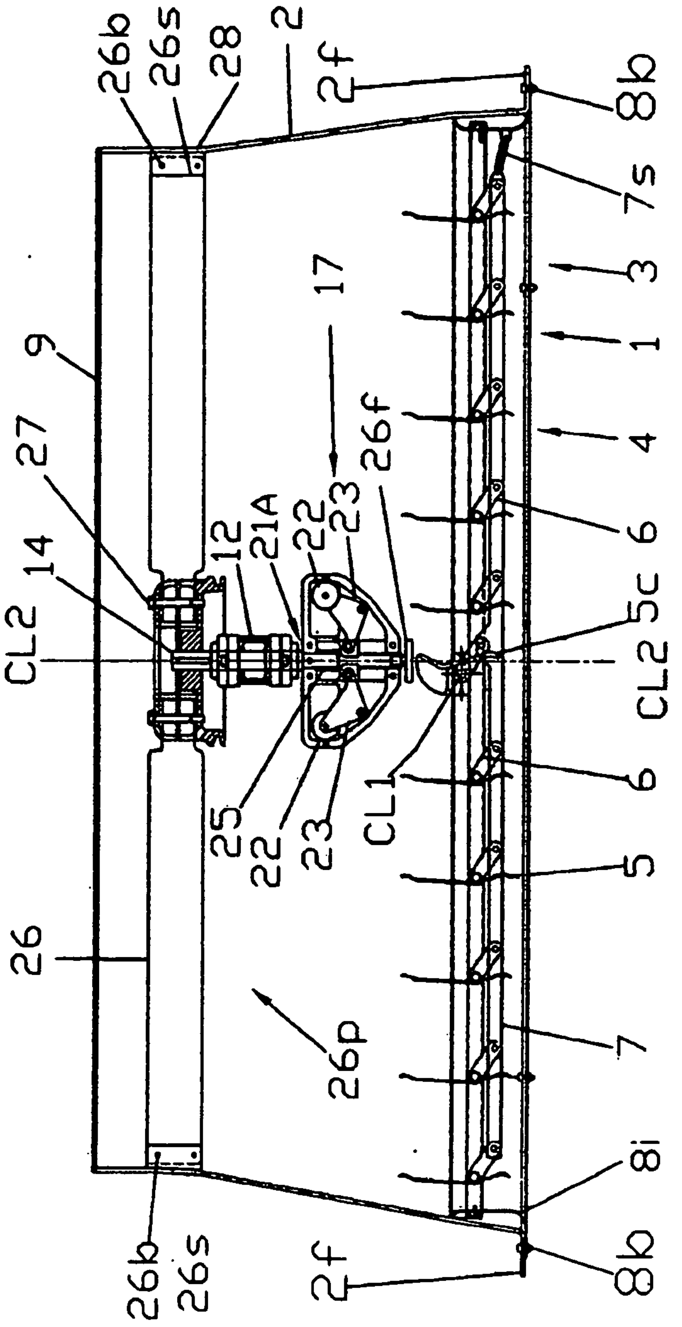


FIG.3B

Replacement Sheet

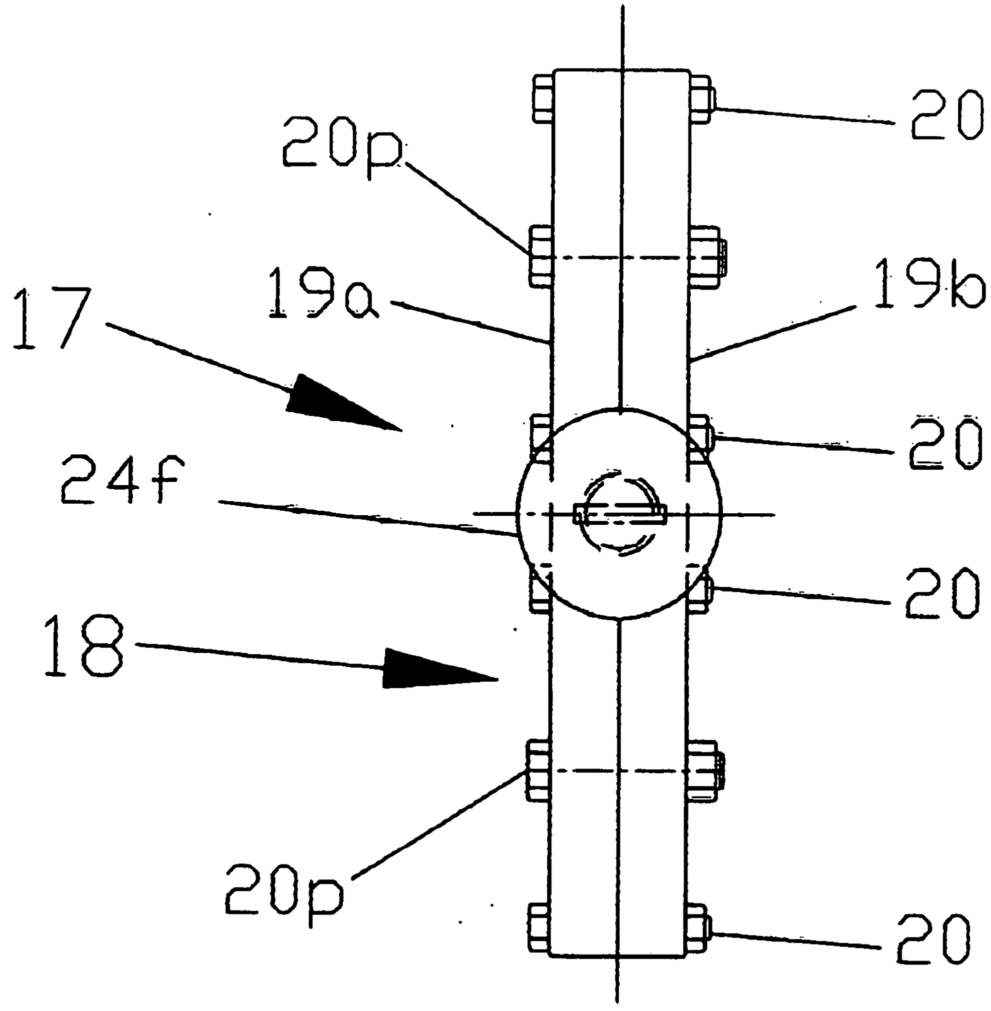
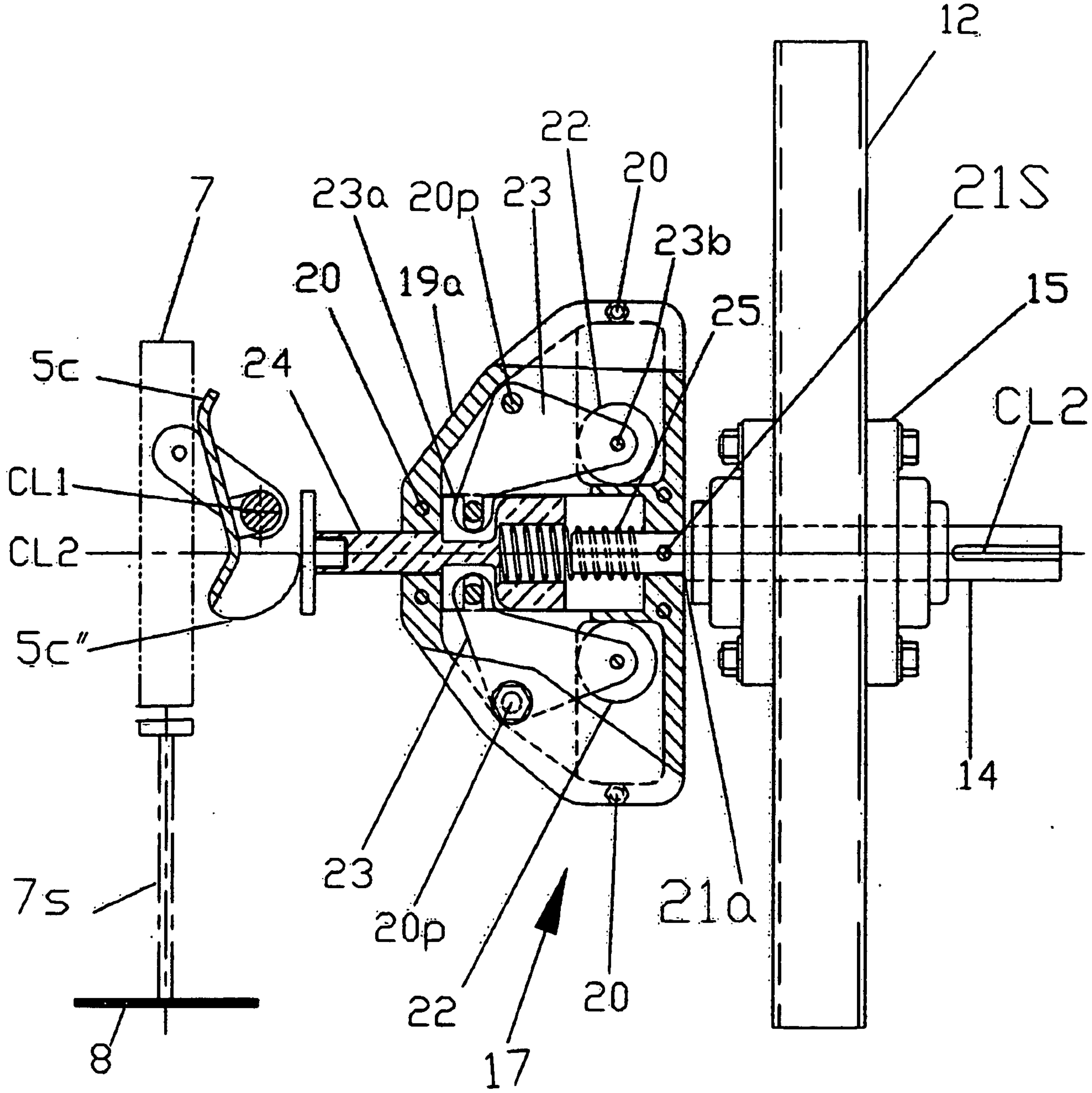


FIG. 4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5c
CL2
CL1
CL2
5c″
7s
20p

FIG. 5

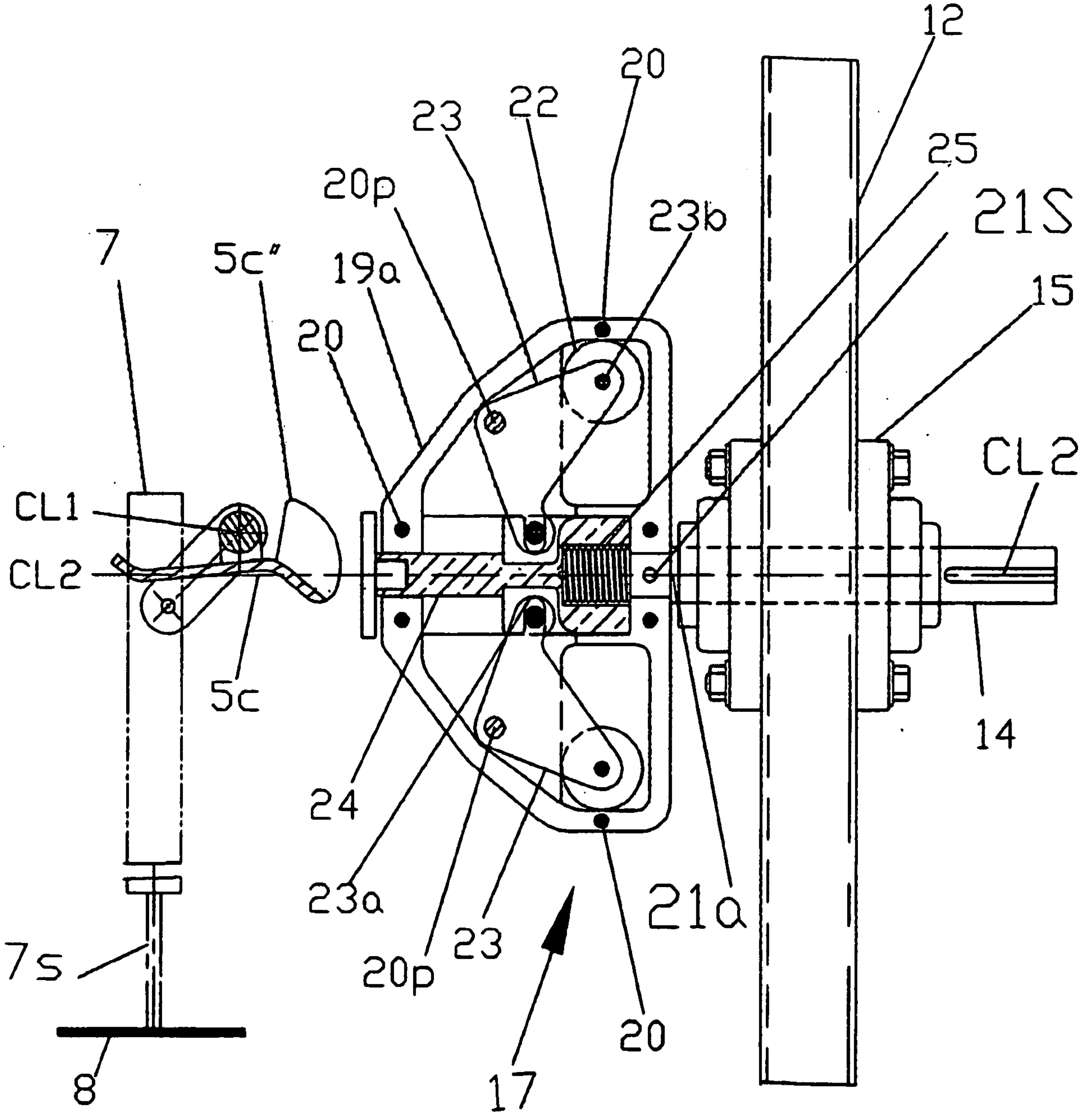
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FIG.6

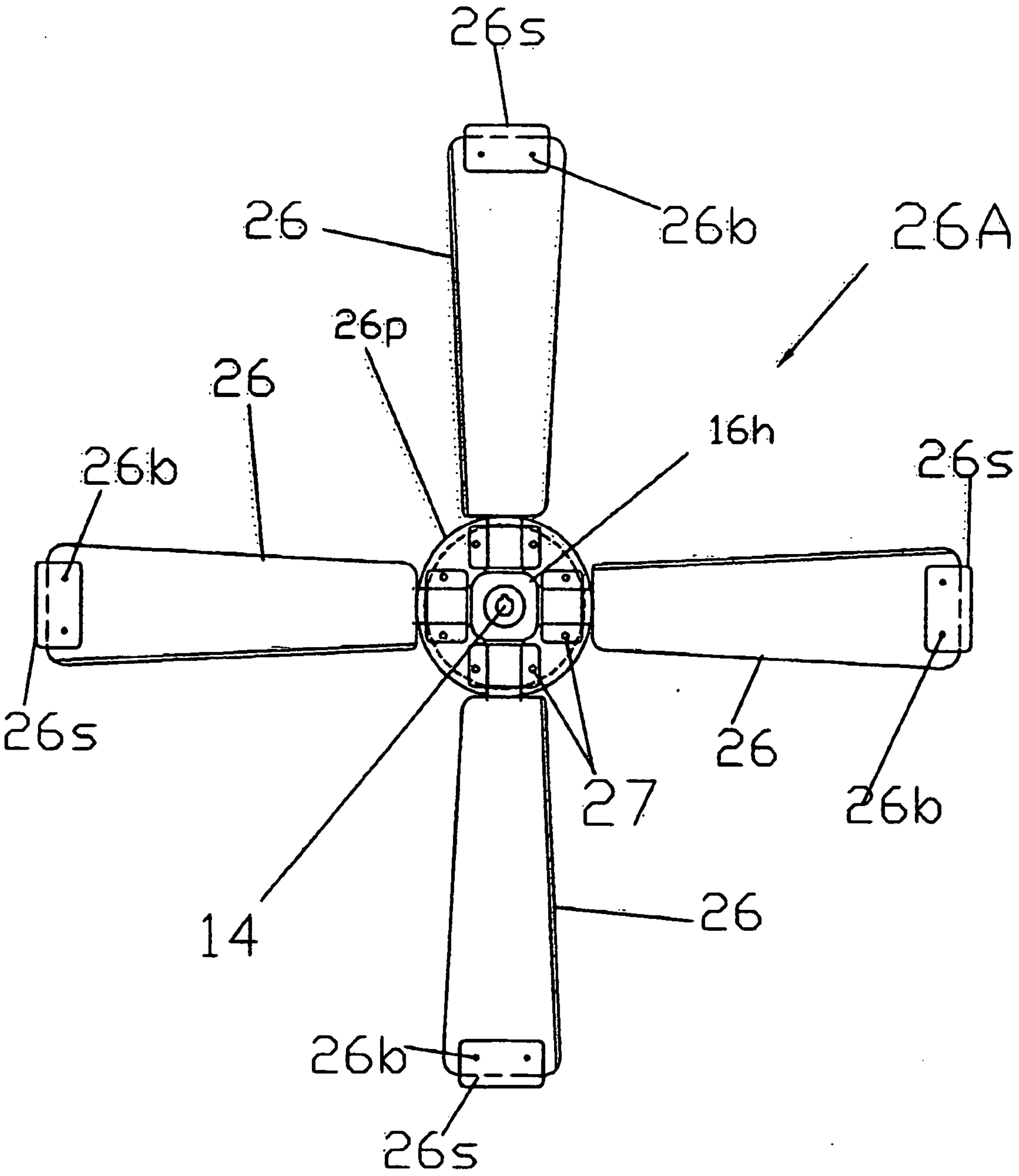

FIG.7